

WHAT IS CLAIMED IS:

1. A method for detecting the presence of or predisposition to an ectodermal disorder comprising the steps of:

(a) detecting the presence of ~~a TAJ gene~~ ^{a human TAJ gene} or gene product in a cell; and

5 (b) correlating the presence of the TAJ gene or gene product with a presence of or predisposition to an ectodermal disorder.

10 *The*
2. ~~A~~ method according to claim 1, wherein the detecting step comprises detecting a TAJ gene.

15 *The*
3. ~~A~~ method according to claim 1, wherein the detecting step comprises detecting a TAJ gene transcript.

20 *The*
4. ~~A~~ method according to claim 1, wherein the detecting step comprises detecting a TAJ protein.

15 *The*
5. ~~A~~ method according to claim 1, wherein the detecting step is performed inferentially by determining a diagnostic sequence of the TAJ gene or gene product in the individual.

20 *The*
6. ~~A~~ method according to claim 1, wherein the TAJ gene or gene product is a variant correlated with the presence of or predisposition to an ectodermal disorder.

25 *The*
7. ~~A~~ method according to claim 1, wherein the ectodermal disorder is an ectodermal dysplasia syndrome.

8. *The*
8. ~~A~~ method according to claim 1, wherein the ectodermal disorder is an ectodermal dysplasia syndrome and the syndrome is Clouston syndrome.

30 *Sub A1*
9. A method for modulating the functional expression of a TAJ gene or gene product in a cell comprising the step(s) of:

contacting a cell with an agent which specifically binds and modulates the functional

expression of a TAJ gene or gene product, wherein:

- Sub A)
cont
- (a) the cell is an ectodermal cell; or
 - (b) the cell is a germ cell which gives rise to progeny ectodermal cells and detecting the functional expression of the TAJ gene or gene product in the progeny cells.

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10. *The* A method according to claim 9, wherein the cell is in situ.

11. *The* A method according to claim 9, wherein the cell is ex situ.

10 12. *The* A method according to claim 9, wherein the contacting step reduces the functional expression of the TAJ gene or gene product.

15 13. *The* A method according to claim 9, wherein the agent is an antibody which specifically binds a TAJ protein.

14. *The* A method according to claim 9, wherein the agent is an intrabody which specifically binds a TAJ protein.

15 15. *The* A method according to claim 9, wherein the agent is an agonist or antagonist of a TAJ protein.

16. *The* A method according to claim 9, wherein the agent is an antisense oligonucleotide which specifically binds a TAJ gene transcript.

25 17. *The* A method according to claim 9, wherein the agent is an oligonucleotide which specifically binds a TAJ gene.

18. *The* A method according to claim 9, wherein the agent is an oligonucleotide which specifically binds a TAJ gene, whereby the gene is changed to a different TAJ gene.

30 19. *The* A method according to claim 9, wherein the agent is an oligonucleotide which

specifically binds a TAJ gene, whereby the gene is changed from a TAJ gene correlated with a presence of or predisposition to an ectodermal disorder to a different TAJ gene not so correlated.

- 5 20. ~~The~~ A method according to claim 9, wherein the agent is an oligonucleotide which specifically binds a TAJ gene, whereby the gene is changed from a TAJ gene correlated with a presence of or predisposition to an ectodermal disorder to a different TAJ gene not so correlated, wherein the ectodermal disorder is an ectodermal dysplasia syndrome.
- 10 21. ~~The~~ A method according to claim 9, wherein the agent is an oligonucleotide which specifically binds a TAJ gene, whereby the gene is changed from a TAJ gene correlated with a presence of or predisposition to an ectodermal disorder to a different TAJ gene not so correlated, wherein the ectodermal disorder is an ectodermal dysplasia syndrome and the syndrome is Clouston syndrome.